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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/605,455

Applicant(s)

LEE, KUEI-JUNG

Examiner

Justin I. King

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1-9 are objected to because of the following informalities: The preamble of the Claim 1 recites “an interface port on *anelectronic* device host”. Applicant may have meant “an electronic” instead of. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-12 and 14-36 are rejected under 35 U.S.C. 102(a) as being anticipated by Lee, J Y (KR 2002068004).

Referring to claim 1: Lee discloses a wireless USB LAN card with a flash memory storing the LAN driver (English Abstract). Lee’s wireless USB LAN card is the claimed peripheral device capable of being connected to an interface port on an electronic device host (the computer host). Lee’s peripheral device comprises an application module (the wireless LAN card), a storage module (the flash memory), and a hub controller (the USB hub controller according to the USB Specification 2.0 Section 4.8.2.1). Lee’s USB wireless LAN card is connecting to the interface port, and then enabling the hub controller for controlling data

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transmission among the application module, the storage module, and the electronic device host.

Lee's flash memory contains the driver to operate the wireless LAN card, which is the claimed enabling the storage module and utilizing the electronic device host for retrieving a device driver of the application module from the storage module through the hub controller, and running the device driver to operate the application module. Hence, the claim is anticipated by Lee.

Referring to claim 2: Lee discloses the USB standard.

Referring to claims 3-5: Lee discloses the flash memory for storing the wireless device driver (abstract).

Referring to claim 6: The incorporated USB Specification discloses the power management over each USB device. The USB Specification discloses that each hub provides the current/voltage to the downstream ports (USB Specification, Rev. 2.0, Section 7.2.1); the USB hub's means to control and to provide the voltage to the downstream ports is the claimed power controller electrically connecting to the storage module and the application module for controlling if a predetermined voltage is delivered to the storage module to enable the storage module and controlling if the predetermined voltage is delivered to the application module to enable the application module.

Referring to claim 7: The USB Specification discloses the power management over each USB device. The USB Specification discloses that each bus-powered hub draws power from the upstream port and provides the current/voltage to the downstream ports (USB Specification, Rev. 2.0, Section 7.2.1), which is the claimed outputting voltage from the device host through the interface port.

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Referring to claim 8: Since the driver is needed before operating the LAN module, the hub controller will have to enable the first port with the driver before be able to enable the second port.

Referring to claim 10: Lee discloses a wireless USB LAN card with a flash memory storing the LAN driver (English Abstract). Lee's wireless USB LAN card is the claimed peripheral device capable of being connected to an interface port on an electronic device host (the computer host). Lee's peripheral device comprises an application module (the wireless LAN card), a storage module (the flash memory), and a hub controller (the USB hub controller according to the USB Specification 2.0 Section 4.8.2.1). Lee's USB wireless LAN card is connecting to the interface port, and then enabling the hub controller for controlling data transmission among the application module, the storage module, and the electronic device host. Lee's flash memory contains the driver to operate the wireless LAN card, which is the claimed enabling the storage module and utilizing the electronic device host for retrieving a device driver of the application module from the storage module through the hub controller, and running the device driver to operate the application module. Hence, the claim is anticipated by Lee.

Referring to claim 11: The incorporated USB Specification discloses the power management over each USB device. The USB Specification discloses that each hub provides the current/voltage to the downstream ports (USB Specification, Rev. 2.0, Section 7.2.1); the USB hub's means to control and to provide the voltage to the downstream ports is the claimed power controller electrically connecting to the storage module and the application module for controlling if a predetermined voltage is delivered to the storage module to enable the storage

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module and controlling if the predetermined voltage is delivered to the application module to enable the application module.

Referring to claim 12: The USB Specification discloses the power management over each USB device. The USB Specification discloses that each bus-powered hub draws power from the upstream port and provides the current/voltage to the downstream ports (USB Specification, Rev. 2.0, Section 7.2.1), which is the claimed outputting voltage from the device host through the interface port.

Referring to claim 14: Lee discloses the device employing the USB standard.

Referring to claims 15-16: Lee discloses a flash memory, which is a personal disk comprising a non-volatile memory for storing the device driver.

Referring to claim 17: Lee discloses a wireless LAN card.

Referring to claim 18: Since the driver is needed before operating the LAN module, the hub controller will have to access the storage module for the driver before be able to enable the application module.

Referring to claim 19: Lee discloses a wireless USB LAN card with a flash memory storing the driver (English abstract). Lee's wireless USB LAND card is the claimed peripheral device capable of being connected to an interface port of a host (the computer host). Lee's peripheral device comprises a connector (the standard USB connector according to the USB standard) having a plurality of pins for connecting the interface port of the host; a hub controller (the USB hub controller according to the USB Specification 2.0 Section 4.8.2.1) electrically connected to the connector; an application module (the USB wireless LAN card) electrically

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connected to the hub controller; and a storage module (the flash memory) electrically connected to the hub controller for storing data. Hence, claim is anticipated by Lee.

Referring to claim 20: Lee discloses a wireless LAN (WLAN) card, and the WLAN module's means for receiving the wireless signal is the antenna.

Referring to claim 21: The connecting means between the wireless LAN to the hub controller is the claimed application interface, and the connecting means between the flash memory and the hub controller is the claimed storage interface.

Referring to claim 22: Lee discloses a wireless LAN (WLAN) card, and the WLAN module's means for receiving the wireless signal is the antenna.

Referring to claim 23: Since the driver is needed before operating the LAN module, the hub controller will have to access the flash memory for the driver before be able to enable the LAN port. Thus, the means to enable the LAN port is equivalent to the claimed switch for controlling whether the application module is enabled.

Referring to claim 24: Lee discloses a wireless LAN (WLAN) card, and the WLAN module's means for receiving the wireless signal is the antenna.

Referring to claim 25: Lee discloses a wireless USB LAN card with a flash memory card storing the driver. The USB bus is a serial bus, and means for connecting the hub controller to the flash memory and to the wireless LAN module are the first port and second port respectively.

Referring to claim 26: Lee discloses a wireless USB LAN card with a flash memory storing the driver. Lee's wireless USB LAN card is the claimed peripheral device capable of being connected to an interface port of a host (the computer host). Lee's peripheral device comprises a connector (the standard USB connector according to the USB standard) having a

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plurality of pins for connecting the interface port of the host, a hub controller (the USB hub controller according to the USB Specification 2.0 Section 4.8.2.1) electrically connected to the connector, and a storage module (the flash memory) electrically connected to the hub controller for storing data wherein the storage module stores a device driver of the peripheral device in advance, and the host retrieves the device driver from the storage module when the peripheral device is connected to the interface port for a first time. Hence, the claim is anticipated by Lee.

Referring to claim 27: Lee discloses a wireless USB LAN card with a flash memory storing the driver. Lee's wireless LAN module is the claimed application module electrically connected to the hub controller for performing a predetermined operation.

Referring to claim 28: Lee discloses a wireless LAN (WLAN) card, and the WLAN module's means for receiving the wireless signal is the antenna.

Referring to claim 29: Lee's means for connecting the hub controller to the flash memory and to the wireless LAN module are the storage interface and application interface respectively.

Referring to claim 30: Lee discloses a wireless LAN (WLAN) card, and the WLAN module's means for receiving the wireless signal is the antenna.

Referring to claim 31: Since the driver is needed before operating the LAN module, the hub controller will have to access the flash memory for the driver before be able to enable the LAN port. Thus, the means to enable the LAN port is equivalent to the claimed switch for controlling whether the application module is enabled.

Referring to claim 32: Lee discloses a wireless LAN (WLAN) card, and the WLAN module's means for receiving the wireless signal is the antenna.

Referring to claim 33: Lee discloses a wireless USB LAN card with a flash memory card storing the driver. The USB bus is a serial bus, and means for connecting the hub controller to the flash memory and to the wireless LAN module are the first port and second port respectively.

Referring to claim 34: Lee discloses a wireless USB LAN card with a flash memory card storing the driver. Lee's wireless USB LAN card is connected to the interface port of the host (the computer host). Lee's means for connecting the hub controller to the flash memory and to the wireless LAN module are the first port and second port respectively, and the driver is needed before operating the LAN module, the hub controller will have to access the flash memory for the driver before be able to enable the LAN port. Thus, the host is first electrically connected to the storage module through the first port of the hub controller, and then the host is electrically connected to the application module through the second port of the hub controller.

Referring to claim 35: Lee discloses a wireless USB LAN card with a flash memory card storing the driver (English abstract). Lee's wireless USB LAN card is the peripheral device capable of being connected to an interface port of the electronic device host (the computer host). Lee's peripheral device comprises a housing, an application module (the wireless LAN functioning module) for accessing data, a storage module (the flash memory) positioned inside the housing; and a hub controller (the USB hub controller according to the USB Specification 2.0 Section 4.8.2.1) positioned inside the housing, the hub controller being electrically connected to the application module and the storage module; wherein when the hub controller is electrically connected to the interface port, the electronic device host is capable of retrieving the data through the hub controller, and the electronic device host is capable of transferring the data to the

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storage module through the hub controller for storing the data in the storage module. Hence, the claim is anticipated by Lee.

Referring to claim 36: Lee discloses a wireless USB LAN card with a flash memory card storing the driver.

4. Claims 10-15 and 17-34 are rejected under 35 U.S.C. 102(a) as being anticipated by the admitted prior art.

Referring to claim 10: The admitted prior art discloses connecting the peripheral device and the interface port; enabling the hub controller (figure 1, structure 33) for controlling data transmission among the application module (figure 1, structure 40), the storage module (figure 1, structure 38), and the electronic device host (figure 1, structure 12); enabling the storage module; utilizing the electronic device host for retrieving a device driver of the application module from the storage module through the hub controller (Specification, page 5, lines 8-17); and running the device driver to operate the application module. Hence, the claim is anticipated by the admitted prior art.

Referring to claim 11: The incorporated USB Specification discloses the power management over each USB device. The USB Specification discloses that each hub provides the current/voltage to the downstream ports (USB Specification, Rev. 2.0, Section 7.2.1); the USB hub's means to control and to provide the voltage to the downstream ports is the claimed power controller electrically connecting to the storage module and the application module for controlling if a predetermined voltage is delivered to the storage module to enable the storage

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module and controlling if the predetermined voltage is delivered to the application module to enable the application module.

Referring to claim 12: The USB Specification discloses the power management over each USB device. The USB Specification discloses that each bus-powered hub draws power from the upstream port and provides the current/voltage to the downstream ports (USB Specification, Rev. 2.0, Section 7.2.1), which is the claimed outputting voltage from the device host through the interface port.

Referring to claims 13-14: The admitted prior art discloses both the USB (figure 1) and the IEEE 1394 (Specification, paragraphs 4-5).

Referring to claim 15: The admitted prior art discloses an optical disk (Specification, page 5, line 17), which is a non-volatile memory.

Referring to claim 17: The admitted prior art discloses the WLAN (figure 1, structure 40).

Referring to claim 18: The admitted prior art also discloses that a driver is needed to operate the LAN module (Specification, page 5, lines 8-17). Since the driver is needed before operating the LAN module, the hub controller will have to enable the first port with the driver before be able to enable the second port.

Referring to claim 19: The admitted prior art discloses a USB module (figure 1, the combined structures 33, 38, and 40) with a wireless LAN card and a memory storing the driver (Specification, figure 1, page 5, lines 8-17). The prior art's USB module is the claimed peripheral device capable of being connected to an interface port of a host (the host computer). The peripheral device comprises a connector (The standard USB connector according to the USB

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Specification) having a plurality of pins for connecting the interface port of the host; a hub controller (the USB hub controller according to the USB Specification 2.0 Section 4.8.2.1) electrically connected to the connector, an application module (figure 1, structure 40) electrically connected to the hub controller, and a storage module (figure 1, structure 38) electrically connected to the hub controller for storing data. Hence, the claim is anticipated by the admitted prior art.

Referring to claim 20: The admitted prior art discloses a WLAN module (figure 1, structure 40), and the WLAN module's means for receiving wireless signal is the antenna.

Referring to claim 21: The admitted prior art discloses an application interface (figure 1, structure 34b) and a storage interface (figure 1, structure 34c), wherein the application module is electrically connected to the hub controller through the application interface, and the storage module is electrically connected to the hub controller through the storage interface.

Referring to claim 22: The admitted prior art discloses a WLAN module (figure 1, structure 40), and the WLAN module's means for receiving wireless signal is the antenna.

Referring to claim 23: Since the driver is needed before operating the functional module, the hub controller will have to access the memory for the driver before be able to enable the LAN connection. Thus, the means to enable the LAN port is equivalent to the claimed switch for controlling whether the application module is enabled.

Referring to claim 24: The admitted prior art discloses a WLAN module (figure 1, structure 40), and the WLAN module's means for receiving wireless signal is the antenna.

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Referring to claim 25: The USB bus is a serial bus, and the admitted prior art discloses the first port (figure 1, structure 34c) electrically connected to the storage module and a second port (figure 1, structure 34b) electrically connected to the application module.

Referring to claim 26: The admitted prior art discloses a USB module (figure 1, the combined structures 33, 38, and 40) with a wireless LAN card and a memory storing the driver (Specification, figure 1, page 5, lines 8-17). The prior art's USB module is the claimed peripheral device capable of being connected to an interface port of a host (the host computer). The peripheral device comprises a connector (the standard USB connector according to the USB Specification) having a plurality of pins for connecting the interface port of the host, a hub controller (the USB hub controller according to the USB Specification 2.0 Section 4.8.2.1) electrically connected to the connector, and a storage module (figure 1, structure 328) electrically connected to the hub controller for storing data, wherein the storage module stores a device driver of the peripheral device in advance, and the host retrieves the device driver from the storage module when the peripheral device is connected to the interface port for a first time. Hence, claim is anticipated by the admitted prior art.

Referring to claim 27: The admitted prior art discloses a WLAN (figure 1, structure 40), which is the claimed application module electrically connected to the hub controller for performing a predetermined operation.

Referring to claim 28: The admitted prior art discloses a WLAN (figure 1, structure 40), and the WLAN module's means for receiving the wireless signal is the antenna.

Referring to claim 29: The admitted prior art discloses an application interface (figure 1, structure 34b) and a storage interface (figure 1, structure 34c), wherein the application module is

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electrically connected to the hub controller through the application interface, and the storage module is electrically connected to the hub controller through the storage interface.

Referring to claim 30: The admitted prior art discloses a WLAN (figure 1, structure 40), and the WLAN module's means for receiving the wireless signal is the antenna.

Referring to claim 31: Since the driver is needed before operating the card reader interface module, the hub controller will have to access the memory for the driver before be able to enable the WLAN. Thus, the means to enable the WLAN port is equivalent to the claimed switch for controlling whether the application module is enabled.

Referring to claim 32: The admitted prior art discloses a WLAN (figure 1, structure 40), and the WLAN module's means for receiving the wireless signal is the antenna.

Referring to claim 33: The USB bus is a serial bus, and the admitted prior art discloses a first port (figure 1, structure 34c) electrically connected to the storage module and a second port (figure 1, structure 34b) electrically connected to the application module.

Referring to claim 34: The admitted prior art discloses a USB module (figure 1, the combined structures 33, 38, and 40) with a wireless LAN card and a memory storing the driver (Specification, figure 1, page 5, lines 8-17). The prior art's USB module is the claimed peripheral device capable of being connected to an interface port of a host (the host computer). Since the driver is needed before operating the card reader interface module, the hub controller will have to access the memory for the driver before be able to enable the card reader port. Thus, the host is first electrically connected to the storage module through the first port of the hub controller, and then the host is electrically connected to the application module through the second port of the hub controller.

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5. Claims 10-12, 14-16, 18-19, 21, 23, 25-27, 29, 31, 33-35 are rejected under 35

U.S.C. 102(a) as being anticipated by Gray et al. (U.S. Patent No. 6,168,077).

Referring to claim 10: Gray discloses a USB card reader with a memory storing the operating driver (abstract, column 4, lines 28-30). Gray discloses connecting the peripheral device and the interface port (figure 1B); enabling the hub controller for controlling data transmission among the application module (figure 1B, structure 30), the storage module (figure 1B, structure 42), and the electronic device host (figure 1A, structure 12); enabling the storage module; utilizing the electronic device host for retrieving a device driver of the application module from the storage module through the hub controller; and running the device driver to operate the application module (abstract, column 4, lines 28-31). Hence, claim is anticipated by Gray.

Referring to claim 11: The incorporated USB Specification discloses the power management over each USB device. The USB Specification discloses that each hub provides the current/voltage to the downstream ports (USB Specification, Rev. 2.0, Section 7.2.1); the USB hub's means to control and to provide the voltage to the downstream ports is the claimed power controller electrically connecting to the storage module and the application module for controlling if a predetermined voltage is delivered to the storage module to enable the storage module and controlling if the predetermined voltage is delivered to the application module to enable the application module.

Referring to claim 12: The USB Specification discloses the power management over each USB device. The USB Specification discloses that each bus-powered hub draws power from the upstream port and provides the current/voltage to the downstream ports (USB Specification, Rev.

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2.0, Section 7.2.1), which is the claimed outputting voltage from the device host through the interface port.

Referring to claim 14: Gray discloses the USB protocol.

Referring to claim 15: Gray discloses a ROM (figure 1B, structure 42a), which is a non-volatile memory.

Referring to claim 16: Gray discloses that the storage module can be any machine-readable medium including the flash memory (column 4, lines 13-15).

Referring to claim 18: Since the driver is needed before accessing the attached module, the hub controller will have to enable the first port with the driver before be able to enable the second port.

Referring to claim 19: Gray discloses a USB card reader with a memory storing the operating driver (abstract, column 4, lines 28-30); Gray's card reader is the claimed peripheral device capable of being connected to an interface port of a host (the computer host). Gray's peripheral device comprises a connector (the standard USB connector according to the USB standard) having a plurality of pins for connecting the interface port of the host, a hub controller (figure 1B, structure 40, the USB hub controller according to the USB Specification 2.0 Section 4.8.2.1) electrically connected to the connector, an application module (figure 1B, structure 44) electrically connected to the hub controller; and a storage module (figure 1B, structure 42) electrically connected to the hub controller for storing data. Hence, claim is anticipated by Gray.

Referring to claim 21: Gray's means for connecting the hub controller to the memory and to the card reader interface are the storage interface and application interface respectively.

Referring to claim 23: Since the driver is needed before operating the card reader interface module, the hub controller will have to access the memory for the driver before be able to enable the card reader port. Thus, the means to enable the card reader port is equivalent to the claimed switch for controlling whether the application module is enabled.

Referring to claim 25: Gray discloses a USB card reader with a memory storing the operating driver (abstract, column 4, lines 28-30). The USB bus is a serial bus, and connecting means from the hub controller to both the storage module and the card reader module are the first port and the second port respectively.

Referring to claim 26: Gray discloses a USB card reader with a memory storing the operating driver (abstract, column 4, lines 28-30). Gray's USB card reader is the claimed peripheral device capable of being connected to an interface port of a host (the computer host). Gray's peripheral device comprises a connector (the standard USB connector according to the USB Specification) having a plurality of pins for connecting the interface port of the host, a hub controller (figure 1B, structure 40, the USB hub controller according to the USB Specification 2.0 Section 4.8.2.1) electrically connected to the connector, and a storage module (figure 1B, structure 42) electrically connected to the hub controller for storing data, wherein the storage module stores a device driver of the peripheral device in advance, and the host retrieves the device driver from the storage module when the peripheral device is connected to the interface port for a first time. Hence, claim is anticipated by Gray.

Referring to claim 27: Gray discloses a USB card reader with a memory storing the operating driver (abstract, column 4, lines 28-30). Gray's card reader module (figure 1B,

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structure 44) is the claimed application module electrically connected to the hub controller for performing a predetermined operation.

Referring to claim 29: Gray discloses an application interface (the connecting means between the structures 40 and 44 in figure 1B) and a storage interface (the connecting means between the structures 40 and 42 in figure 1B), wherein the application module is electrically connected to the hub controller through the application interface, and the storage module is electrically connected to the hub controller through the storage interface.

Referring to claim 31: Since the driver is needed before operating the card reader interface module, the hub controller will have to access the memory for the driver before be able to enable the card reader port. Thus, the means to enable the card reader port is equivalent to the claimed switch for controlling whether the application module is enabled.

Referring to claim 33: The USB bus is a serial bus, and the hub controller comprises a first port (the connecting means between the structures 40 and 42 in figure 1B) electrically connected to the storage module and a second port (the connecting means between the structures 40 and 44 in figure 1B) electrically connected to the application module.

Referring to claim 34: Gray discloses a USB card reader with a memory storing the operating driver (abstract, column 4, lines 28-30). Gray's USB card reader is the claimed peripheral device connected to the interface port of the host (the computer host). Since the driver is needed before operating the card reader interface module, the hub controller will have to access the memory for the driver before be able to enable the card reader port. Thus, the host is first electrically connected to the storage module through the first port of the hub controller, and

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then the host is electrically connected to the application module through the second port of the hub controller.

Referring to claim 35: Gray discloses a USB card reader with a memory storing the operating driver (abstract, column 4, lines 28-30). Gray's USB card reader is the claimed peripheral device capable of being connected to an interface port of the electronic device host (the computer host), and Gray's USB card reader comprises a housing (figure 1B, structure 20), an application module (figure 1B, structure 44) for accessing data, a storage module (figure 1B, structure 42) positioned inside the housing, and a hub controller (figure 1B, structure 40, the USB hub controller according to the USB Specification 2.0 Section 4.8.2.1) positioned inside the housing, the hub controller being electrically connected to the application module and the storage module; wherein when the hub controller is electrically connected to the interface port, the electronic device host is capable of retrieving the data through the hub controller, and the electronic device host is capable of transferring the data to the storage module through the hub controller for storing the data in the storage module. Hence, claim is anticipated by Gray.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Referring to claims 1-9: The prior art discloses a computer host (figure 1, structure 12), an application module (figure 1, structure 40) and a storage module storing a device driver (figure 1, structure 30, Specification, page 5, lines 8-17) of the application module. The prior art discloses the hub (figure 3, structure 33) with the USB standard, and the USB standard provides that a USB hub must have a hub controller (USB 2.0 Section 4.8.2.1). Hence, the prior art discloses that the hub controller, positioned inside the housing, is electrically connected to the application module and the storage module; wherein when the hub controller is electrically connected to the interface port, the electronic device host is capable of retrieving the device driver stored by the storage module and running the device driver to operate the application module.

The admitted prior art does not explicitly disclose or teach the physical structure/position such that the application module positioned at least partially inside the housing and the storage module is positioned inside the housing.

Wu discloses a USB wireless LAN adapter (figure 2, structure 21). Wu discloses that when this USB wireless LAN adapter inserts into the USB port, this USB application module positioned at least partially inside the housing. Wu teaches one to eliminate the complexity of

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the cabling by using a USB wireless transmitting device for network connection (column 1, paragraph 4).

Gray discloses a dual-mode USB communication adapter with a storage module (figure 1B, structure 42) positioned inside the housing. Gray discloses that a specific USB driver is needed for a typical computer host to communicate with the adapter (column 1, lines 2-22). Gray's storage module includes firmware instructions to support the operations of the adapter and to monitor data and commands from the computer host (column 4, lines 28-30); Gray's instructions stored in the storage module are equivalent to the claimed driver. Gray teaches one to implement the adapter with a build-in memory with necessary instructions for supporting the communication between the host computer and the adapter/attached device.

Hence, it would have been obvious to one having ordinary skill in the computer art to adapt teachings of Wu and Gray onto the admitted prior art at the time Applicant made the invention because Wu teaches one to eliminate the complexity of the cabling by using a USB wireless transmitting device for network connection and Gray teaches one to implement the adapter with a build-in memory and necessary instructions for supporting the communication between the host computer and the adapter/attached device.

Referring to claim 3: Gray discloses a ROM (figure 1B, structure 42a).

Referring to claim 4: Gray discloses the flash memory (column 4, line 14).

Referring to claim 5: Wu discloses a wireless LAN module for accessing a network through wireless transmission.

Referring to claim 6: The incorporated USB Specification discloses the power management over each USB device. The USB Specification discloses that each hub provides the

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current/voltage to the downstream ports (USB Specification, Rev. 2.0, Section 7.2.1); the USB hub's means to control and to provide the voltage to the downstream ports is the claimed power controller electrically connecting to the storage module and the application module for controlling if a predetermined voltage is delivered to the storage module to enable the storage module and controlling if the predetermined voltage is delivered to the application module to enable the application module.

Referring to claim 7: The USB Specification discloses the power management over each USB device. The USB Specification discloses that each bus-powered hub draws power from the upstream port and provides the current/voltage to the downstream ports (USB Specification, Rev. 2.0, Section 7.2.1), which is the claimed outputting voltage from the device host through the interface port.

Referring to claim 8: The admitted prior art discloses that the storage module is electrically connected to a first port of the hub controller and the application module is electrically connected to a second port of the hub controller (figure 1). The admitted prior art also discloses that a driver is needed to operate the LAN module (Specification, page 5, lines 8-17). Since the driver is needed before operating the LAN module, the hub controller will have to enable the first port with the driver before be able to enable the second port.

Referring to claim 9: The admitted prior art discloses the IEEE 1394 (Specification, paragraphs 4-5).

9. Claims 16 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of the admitted prior art and Gray.

Referring to claim 16: The disclosure of the admitted prior art is stated above in the rejection for the claims 10 and 15. The admitted prior art does not explicitly disclose a flash memory as the storage module. Gray discloses a dual-mode USB communication adapter with a storage module (figure 1B, structure 42) positioned inside the housing. Gray teaches that the storage module can be any machine-readable medium including the flash memory (column 4, lines 13-15). Gray further discloses that a specific USB driver is needed for a typical computer host to communicate with the adapter (column 1, lines 2-22). Gray's storage module includes firmware instructions to support the operations of the adapter and to monitor data and commands from the computer host (column 4, lines 28-30); Gray's instructions stored in the storage module are equivalent to the claimed driver. Gray teaches one to implement the adapter with a build-in memory with necessary instructions for supporting the communication between the host computer and the adapter/attached device.

Hence, it would have been obvious to one having ordinary skill in the computer art to adapt teaching of Gray onto the admitted prior art at the time Applicant made the invention because Gray teaches one to implement the adapter with a build-in flash memory and necessary instructions for supporting the communication between the host computer and the adapter/attached device.

Referring to claims 35-36: The prior art discloses a computer host (figure 1, structure 12), an application module (figure 1, structure 40) and a storage module storing a device driver (figure 1, structure 30, Specification, page 5, lines 8-17) of the application module. The prior art discloses the hub (figure 3, structure 33) with the USB standard, and the USB standard provides that a USB hub must have a hub controller (USB 2.0 Section 4.8.2.1). Hence, the prior art

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discloses that the hub controller, positioned inside the housing, is electrically connected to the application module and the storage module; wherein when the hub controller is electrically connected to the interface port, the electronic device host is capable of retrieving the device driver stored by the storage module and running the device driver to operate the application module.

The admitted prior art does not explicitly disclose or teach the physical structure/position such that the storage module is positioned inside the housing.

Gray discloses a dual-mode USB communication adapter with a storage module (figure 1B, structure 42) positioned inside the housing. Gray discloses that a specific USB driver is needed for a typical computer host to communicate with the adapter (column 1, lines 2-22). Gray's storage module includes firmware instructions to support the operations of the adapter and to monitor data and commands from the computer host (column 4, lines 28-30); Gray's instructions stored in the storage module are equivalent to the claimed driver. Gray teaches one to implement the adapter with a build-in memory with necessary instructions for supporting the communication between the host computer and the adapter/attached device.

Hence, it would have been obvious to one having ordinary skill in the computer art to adapt teachings of Gray onto the admitted prior art at the time Applicant made the invention because Gray teaches one to implement the adapter with a build-in memory and necessary instructions for supporting the communication between the host computer and the adapter/attached device.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Korean Public Publication KR 2004059393 to Mun G H: Mun discloses a USB module combining a wireless LAN and a flash memory.

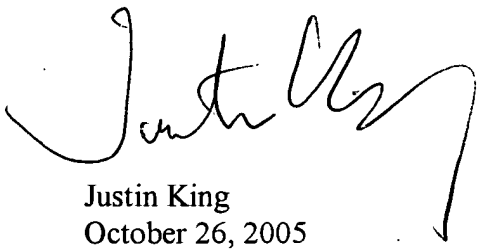
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin I. King whose telephone number is 571-272-3628. The examiner can normally be reached on Monday through Friday, 9:00 am to 5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571-272-3676 or on the central telephone number, (571) 272-2100. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

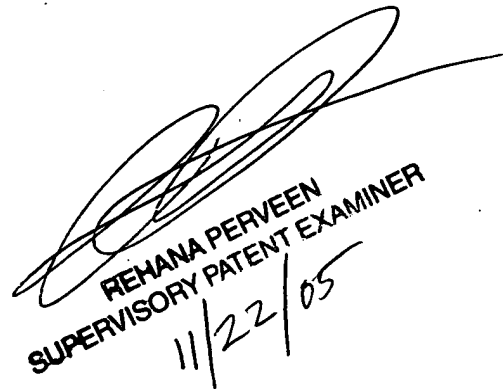
Lastly, paper copies of cited U.S. patents and U.S. patent application publications will cease to be mailed to applicants with Office actions as of June 2004. Paper copies of foreign patents and non-patent literature will continue to be included with office actions. These cited

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Justin King
October 26, 2005



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SUPERVISORY PATENT EXAMINER
11/22/05